Claim Listing

1–33. (cancelled)

34. (currently amended) A method of reeling a paper web comprising the steps of:

bringing the paper web in an incoming direction to a reel spool, and reeling the paper web on to the reel spool to form a machine reel of increasing diameter in a preliminary reeling station, the machine reel having a periphery and a peripheral direction defined as extending along the periphery of the machine reel;

passing the paper web through a nip formed between an endless loop of a support member and the machine reel, wherein the endless loop is supported between a first guide roll and a second guide roll mounted inside the endless loop, wherein the first guide roll is positioned spaced against the incoming direction from the second guide roll, and wherein the paper web first contacts the reel spool or machine reel while the paper web is engaged with the endless loop, wherein the first guide roll is defined as the roll which first comes into nipping engagement with the reel spool, with the paper web and endless loop of the support member therebetween, and wherein the first guide roll begins the reeling of the paper web on to the reel spool to form the machine reel;

as the machine reel increases in diameter while still in the preliminary reeling station, moving an central axis defined by the first guide roll in the peripheral direction and against the incoming direction; and

transferring the machine reel away from the preliminary reeling station in the incoming direction i.e., a machine direction, in a transfer device forming a secondary reeling station, the transfer device mounted for motion in the incoming direction so that the machine reel continues to form the nip through which the paper web passes until reeling of the machine reel is finished.

35. (previously presented) The of claim 34, wherein the step of moving the first guide roll in the peripheral direction and against the incoming direction is preformed in such a manner that the first guide roll moves from a first position where the first guide roll initially engages the support member against the machine reel at the nip, to a position further away from the machine reel, so that the machine reel is first formed with a hard nip, and after movement of the first guide roll the machine roll is formed with a nip which is softer than the hard nip while still in the preliminary reeling station.

36. (currently amended) The method of claim 35, wherein the reel spool has a central reel axis and the ~~centeral~~ central axis defined by the first guide roll and the reel axis defining a plane which is substantially vertical when the first guide roll initially engages the support member endless loop against the machine reel at the nip.

37. (previously presented) The method of claim 34, wherein the reeling spool is in a stationary position during reeling in the preliminary reeling station.

38. (previously presented) The method of claim 34, wherein a new reeling spool is brought to the preliminary reeling station and against the loop of the supporting member with a substantially vertical linear movement.

39. (previously presented) The method of claim 34, wherein the first guide roll and the second guide roll are both moved against the incoming direction, in such a manner that the position of the endless loop of the supporting member also moves in the against the incoming direction.

40. (previously presented) The method of claim 39, wherein the first guide roll and the second guide roll are interconnected with a rigid connecting body and so move together.

41. (previously presented) The method of claim 34, wherein the first guide roll and the second guide roll are moved independently.

42. (previously presented) The method of claim 34, wherein the first guide roll is transferred with respect to the loop of the supporting member.

43. (previously presented) The method of claim 34, wherein there is a third guide roll mounted inside the endless loop in a direction against the incoming direction, and wherein the endless loop contacts the reel spool or machine reel between the first guide roll and the second guide roll.

44. (currently amended) A reel-up for continuously reeling a paper web into reels around rotating reels pools, the reel-up comprising;

a reel spool having a spool axis, and an outer periphery for receiving a paper web and on which is forming a paper reel;

a primary reeling device arranged to receive the reel spool;

wherein the web extends in an incoming direction to the paper reel;

a supporting member having an endless loop and inside the endless loop at least a first guide roll and a second guide roll, the endless loop having an upper web-carrying portion arranged to be driven in a machine direction, and wherein the upper web-carrying portion forms a nip with the paper reel forming on the reel spool, said nip positioned where the web first joins the paper reel;

wherein the first guide roll is arranged so as to engage the paper reel with the paper web and the endless loop therebetween, before any other roll which engages the paper reel, and wherein the first guide roll is arranged to begin the reeling of the paper web on to the reel spool to form the machine reel;

wherein the first guide roll is mounted for motion from a first position in nipping engagement with the paper reel to a second position against the incoming direction of the web such that a portion of the upper web-carrying portion of the endless loop wraps around the an outer periphery of the paper reel; and

a transfer device mounted for motion in the machine direction, and arranged to receive the reel spool from the primary reeling device and move the reel spool in the machine direction so that the outer periphery of the paper reel remains in engagement with the endless loop upper web-carrying portion during reeling of the paper web on to the reel spool.

45. (previously presented) The reel-up of claim 44, wherein the first guide roll has an axis movable linearly at least in the machine direction.

46. (previously presented) The reel-up of claim 45, wherein the axis of the first guide roll is mounted by a mounting for linear movement in the machine direction and is mounted for linear movement in a vertical direction independent of the mounting for movement in the machine direction.

47. (previously presented) The reel-up of claim 44, further comprising linear rails extending in the machine direction, and wherein the transfer device is mounted for motion in the machine direction on the linear rails.

48. (previously presented) The reel-up of claim 44, further comprising linear rails extending in a vertical direction, wherein the primary reeling device is arranged movable substantially in the vertical direction on the linear guide rails.

49. (previously presented) The reel-up of claim 44, further comprising a third guide roll inside the loop of the supporting member, the third guide roll located against the incoming direction of the web, below and before the first guide roll, so that at the first guide roll the loop does not reverse direction, but rather extends in a diagonally upward direction from the second guide roll to the first guide roll and then extends in a diagonally downward direction to the third guide roll.

50. (currently amended) The reel-up of claim [[50]] 49 wherein the second guide roll is fixedly mounted.

51. (previously presented) The reel-up of claim 50 wherein the third guide roll is adjustably mounted, so as to allow adjustment of the tension of the supporting member.